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The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases and are subject to change without prior notice.

The required features should therefore be specified in each individual case at the time of conclusion of the respective contract.

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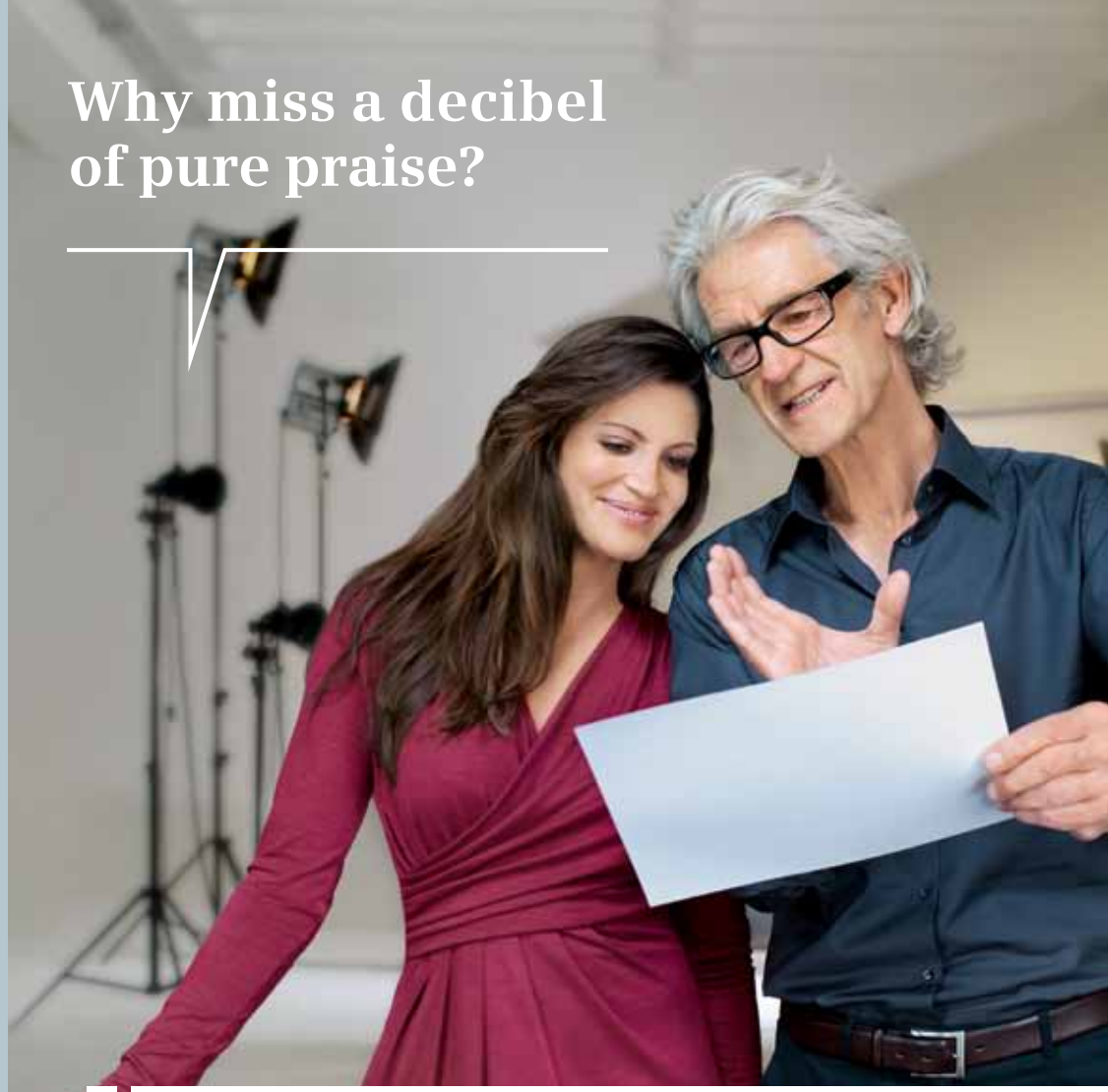
Why miss a decibel of pure praise?



Siemens Pure. It hides. You shine.

The nearly invisible, completely discreet hearing instrument.
www.siemens.com/pure

Answers for life.

SIEMENS

Shawnae Jebbia
Former Miss USA

“Pure hides, so I can shine.”

“I like the sound of a city waking up. My heels clattering against the fresh pavement. A camera clicking just for me. I love the sound of happiness. I even like my heart pounding in my ears followed by the echo of praise. I also enjoy the buzz of nightlife. And the whispers of friendship. I love that I can hear... with my discreet Siemens Pure.”

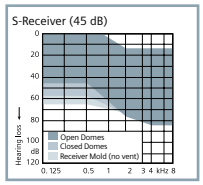
Shawnae Jebbia was a 27-year-old beauty queen when she was diagnosed with hearing loss. She had not only won the Miss USA crown, but was hosting her own television show. An outgoing, energetic entertainment personality, Shawnae faced sudden and unexpected changes in her life. Thanks to sophisticated new hearing instruments and Shawnae’s bright and optimistic attitude, she has become a remarkable and humble role model for people with hearing loss.

Shawnae’s audiologist chose to fit her with Siemens Pure hearing instruments. Designed for utmost discretion, Pure brought back her hearing without changing her look. By combining the most advanced hearing technology with an almost invisible, ultra-small size, Pure gives wearers ultimate confidence in hearing and appearance. After all, nobody wants to miss a decibel of life. With Pure, there’s no need to hide. Pure lets every personality shine through.

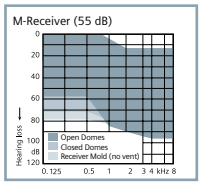
Wow:
70 decibels

Design for discretion.

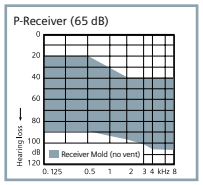
Pure™ lets nothing come between wearers and the world around them. Designed for utmost discretion, Pure packs the most advanced hearing technology into an ultra-small instrument that's nearly invisible when worn. Available in a choice of three performance levels, Pure is one of the most discreet hearing instruments designed for those with up to moderately severe hearing loss.



The 45 dB Receiver. The maximum power output is 108 SPL.



The 55 dB Receiver. The maximum power output is 119 SPL.



The 65 dB Receiver. The maximum power output is 121 SPL.

Pure RIC

The RIC (Receiver-in-Canal) configuration supports 45 dB, 55 dB, and 65 dB receivers and comes in an array of colors including hair and skin tones. The fully automatic, Tek™ compatible Pure RIC instruments adjust to the wearer's surroundings to deliver unmatched sound clarity. Even in the most complex listening environments, no wearer adjustment is needed.

Pure supports now three performance levels: **700, 500 and 300.**

“Being discreet doesn’t mean you can’t be noticed.”

Exchangeable housing
If the wearer’s color preferences change, you can easily exchange Pure’s housing as necessary.

Dome
Our dome protects the receiver against earwax.

Receiver unit
The gentle, curved shape fits the ear comfortably and enables an outstanding hearing performance.

Charging contact
Pure is rechargeable, so your customer won’t have to hassle with batteries.

“It might seem strange at first, but feeling good about your appearance is key to enjoying the beauty of sound. After all, you have to be both physically and emotionally comfortable with the hearing instruments you are wearing. My Pure gives me the confidence to do what I want”

You don’t have to be a model to feel sensitive about your appearance. Almost everybody is concerned about his/her looks. Tiny, elegant and extremely discreet, Pure fits the wearers personalities and styles as well as their hearing requirements.

Pure comes in the smallest possible RIC (Receiver-in-Canal) configuration, and in a choice of three performance levels. Available in an array of natural hair colors and skin tones, Pure blends in perfectly, so your wearers are the ones who stand out. And Pure doesn’t just match their appearance, it automatically adjusts volume and program settings to match their surroundings, for a hearing experience that is completely customized. With a choice of configurations, program options and colors, Pure puts the wearer in control.

14 colors including 12 natural hair colors and skin tones:

Pearl White · Beige · Golden Blonde · Grey · Granite · Brown · Sandy Brown

Chestnut · Titanium · Black · Charcoal · Silver · Midnight Blue · Evening Red

“The softest sounds can evoke powerful emotions.”

The goal of every Siemens hearing instrument is to provide a hearing experience that’s as natural as possible. Pure is equipped with specially designed features that combine to provide a natural sound experience and help counter the effects of hearing loss. This enables the wearer to perceive sounds in the same way as individuals with normal hearing and easily recognize the direction of sound.

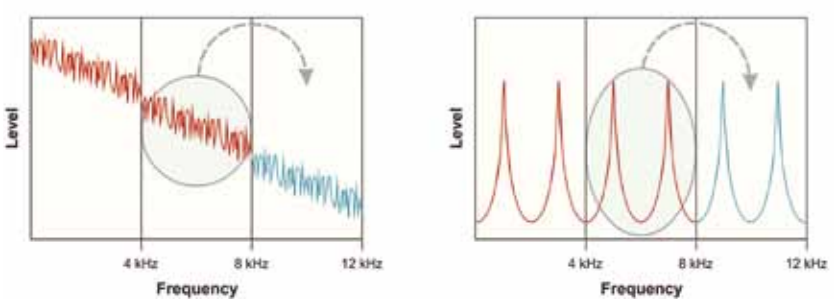
Natural Sound

Loudness and Recognition

Many hearing instrument wearers report challenges with sounds that are uncomfortably loud. But Pure’s **AGC-I** and the new multi-channel **AGC-O** systems work together to help balance the wearer’s perceptions of soft, average, and loud sounds and ensure that sounds are audible and recognizable without being too loud. For optimal flexibility, Pure 700 is equipped with a 16 channel compression system, Pure 500 features 8 channels and Pure 300 has 6 channels.

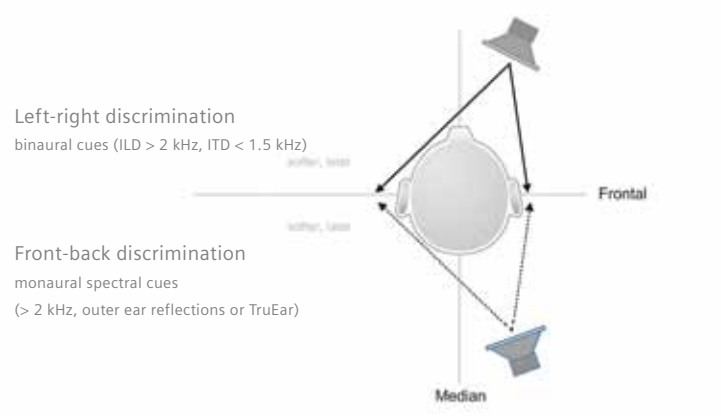
SoundBrilliance™

SoundBrilliance in Pure 700 adds richness and fullness to the hearing instrument’s sound by providing perception of acoustic stimulation up to 12 kHz. SoundBrilliance analyzes the hearing instrument’s input signals and adds high frequencies whenever appropriate. This feature is particularly useful where sound signals are wirelessly transmitted. Bluetooth transmission, for example, is bandlimited to 7.5 kHz, but SoundBrilliance adds high frequencies (up to 12kHz) to the original signals.



Principle of bandwidth extension with SoundBrilliance.
Bandlimited signal in red,extended signal in green.

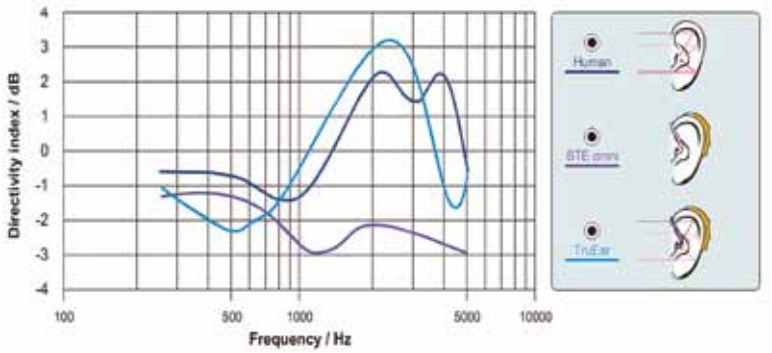
Little secrets: 52 decibels



Localization: different cues used for left-right and front-back discrimination.

Localization

Hearing instrument wearers sometimes have difficulties identifying the direction of sounds. For this reason, Pure offers two technologies for accurate localization and spatial recognition of sounds: TruEar and e2e wireless 2.0. **TruEar** simulates the acoustical cues provided by the human outer ear to enable frontback discrimination of sounds. And **e2e wireless 2.0*** preserves interaural time differences and interaural level differences to ensure optimal left-right discrimination. Studies have shown that this technology improves the left-right localization of sounds by up to 40%.[1]



With conventional BTE instruments, directionality at frequencies above 1.5 kHz is reduced in comparison to the unaided ear. However, with TruEar, a technology that mimics the characteristics of the human outer ear, the directivity of the human outer ear is restored to improve front-back localization.

* e2e wireless 2.0 utilizes a transmission frequency of 3.28 MHz, selected in accordance with the International Telecommunication Union (ITU) recommended frequency band 3.155 MHz to 3.400 MHz for wireless hearing instruments.

[1] Keidser, G., Rohrseitz, K., Dillon, H., Hamacher, V., Carter, L., Rass, U., Convery, E. (2006). "The effect of multi-channel wide dynamic range compression, noise reduction, and directional microphone on horizontal localisation performance in hearing aid wearers." International Journal of Audiology, 45: 563-579.

Learning

Pure 700 is equipped with **SoundLearning**, a sophisticated and advanced learning algorithm that takes DataLearning to a whole new level. In addition to the wearer's preferred volume, SoundLearning learns the preferred setting of compression and frequency shape and minimizes the need for manual adjustments.

With **SoundBalance** (the treble control on the optional Tek Connect) the wearer can directly teach Pure instruments their individual tone preferences. SoundLearning helps to bridge the gap between initial fittings, which happen in a controlled environment, and the real world environment that wearers experience everyday. SoundLearning and DataLearning help create a customized Pure fitting for each wearer.

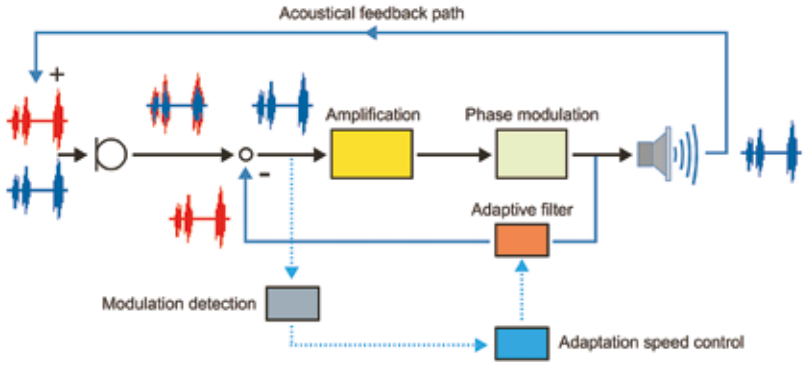
The data logging feature within DataLearning and SoundLearning records useful information like program use, microphone modes, etc. So the instrument can be fine-tuned to the wearer's requirements based on the recorded data. Data logging can also provide useful information for more effective patient counseling and can reduce the number of patient visits by enabling more precise fine-tuning.

Sound Comfort

One of the biggest challenges for hearing instrument wearers is following conversations in loud and/or noisy environments. That's why Pure employs sophisticated digital signal processing techniques to enhance hearing comfort in such situations. All these features are controlled by an advanced classification system, which automatically adjusts the hearing instrument according to the wearer's acoustical situation.

FeedbackBlocker™ with Open Optimizer
Pure's FeedbackBlocker is the next generation of adaptive phase cancellation systems to suppress feedback. Thanks to the new Siemens patented Acoustic Fingerprint Technology, FeedbackBlocker can detect the feedback portion within the microphone signal. So feedback can be suppressed much faster and more reliably than ever before, eliminating embarrasing whistling before it's heard by the wearer or others nearby.

The Open Optimizer is an additional algorithm especially designed to provide even more feedback stability in open fittings, such as Pure.



Block diagram of FeedbackBlocker with Acoustic Fingerprint Technology (AFT). AFT applies phase modulation to the hearing instrument's output signal to enable a reliable detection of feedback.

Speech and Noise Management
Pure's next generation Speech and Noise Management System preserves audibility of soft sounds and supports auditory object recognition to help the auditory system to extract speech out of noise.[1]

Automatic Multichannel Adaptive Directional Microphone System transitions automatically between Omni, TruEar, and Directional modes to improve speech intelligibility in difficult listening environments. This system enables optimum directivity even at low frequencies, for mild, sloping hearing losses.

SoundSmoothing is proven to be the best transient noise suppression system in the industry, thanks to its amount of attenuation and adaptive temporal behavior.[2] SoundSmoothing suppresses transient noises, e.g. clanging dishes, while leaving speech signals intact and makes the hearing experience more comfortable.

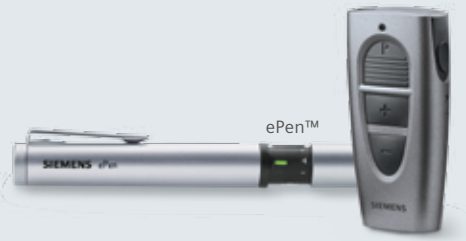
eWindscreen analyzes incoming signals to detect wind noise, then automatically adjusts signal processing to quickly reduce it.

Adaptive Melody Beeps which ensures that Pure's acoustical signals for manual changes are audible even in very loud environments. The volume levels of these signals are adjusted automatically to ensure that they are clearly above the ambient noise level and can increase patient wearing time and hearing instrument acceptance.

Charger

Pure Accessories

Pure is rechargeable, so there is no need to worry about changing batteries in the middle of a meeting or during dinner with friends. The instruments are simply placed in the easy-to-use charger – up to two instruments at a time. After just five hours of charging, the instruments are ready to go all day. For even greater convenience, Pure also runs on regular hearing instrument batteries. The optional ProPocket™ or ePen™ remote control provides easy fingertip control over virtually all instrument functions. They are small enough to fit into a purse or pocket, so wearers can make quick and easy adjustments without others noticing.


ePen™

ProPocket™

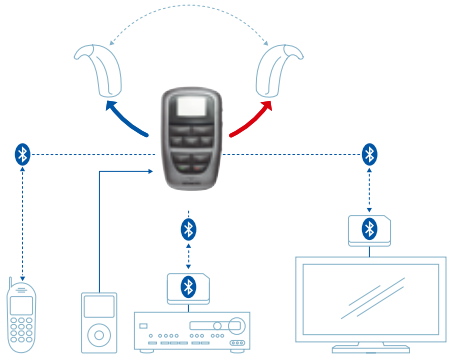
[1] A.S. Bergmen, "Auditora Scene Analysis." Cambridge: MIT, Cambridge, 1990.
[2] Chalupper, J. and Branda, E., "Comparison of Transient Noise Reduction Systems," Hearing Review, January 2008, 20-25.

“My world is connected at the touch of a button.”

“Listening to the phone in both ears is amazing! And it was great to watch TV again without having to read subtitles. Tek has opened up new worlds for me. It’s with me wherever I go.”

Your patients live in a connected world. Mobile. Instant. Always on. Every day there’s some new way to be entertained, be informed, be in touch. Tek Connect is their key to controlling communications between their hearing instruments and their cell phone, audio system, TV, or even PC. It not only provides convenience and comfort, but also great sound quality.

Tek communicates with hearing instruments by transmitting stereo audio signals using Bluetooth® wireless technology. In addition, Tek allows phone signals to be transmitted to both ears, giving the wearer an advantage that other people do not have.



Tek Connect. Smart and powerful, Tek Connect lets you stream audio from your mobile phone, MP3 player, television, or other audio sources directly to your Pure instruments.

Evening plans: 64 decibels

Pure at a glance

		Pure 700 RIC	Pure 500 RIC	Pure 300 RIC
Natural Sound				
AGC-I Compression System (channels)	Multi-channel dynamic range compression	16	8	6
AGC-O Output limitation (channels/programming handles)	Multi-channel output limiting	16/4	8/4	6/1
e2e wireless 2.0™	Synchronizes both instruments and provides better localization	✓	✓	✓
SoundBrilliance™	Enhances the perception of higher frequencies for a richer hearing experience	✓	–	–
TruEar™	Improves localization of sound from front to back	✓	–	–
Sound comfort				
Speech and Noise Management	Reduces annoying noise and enhances speech signals	On/Off + 7 steps	On/Off + 5 steps	On/Off + 3 steps
Adaptive Melody Beeps	Ensures that the acoustical signals are always audible for the wearer	✓	✓	✓
SoundSmoothing™	Softens unwanted transient noises	On/Off + 3 steps	On/Off + 3 steps	On/Off
FeedbackBlocker™ Open Optimizer	With Acoustic Fingerprint Technology (AFT) – eliminates feedback whistling without affecting the quality of speech	✓	✓	✓
Directional Microphone	Improves hearing in multi-talker situations by softening the "buzz" of background conversation	Automatic multi-channel adaptive	Automatic multi-channel adaptive	Automatic adaptive
eWindScreen™	Suppresses wind noise in windy conditions	✓	✓	✓
Microphone Noise reduction	Ensures that microphone noise is not audible in quiet environments	✓	✓	✓
Learning				
SoundLearning™	Learns preferred volume, compression, and frequency shape	✓	–	–
DataLearning™	Automatically learns the wearer's overall volume preferences and logs relevant usage data	✓	✓	–
Data Logging	Records data like program usage and microphone modes for better fine-tuning of the instrument	✓	✓	✓
Wireless Connectivity				
Tek™ compatible	Allows wearers to connect wirelessly to audio devices and bluetooth enabled phones	✓	✓	✓
Instrument accessories				
Rechargeable	With optional 312 charger	✓	✓	✓
ePen™ / ProPocket™	Pocket and ePen-size remote control for volume and program changes with integrated on/off function for hearing instruments	✓	✓	✓

Favorite song:
74 decibels

Fitting comfort

With sophisticated instruments such as Pure, it is increasingly critical to make accurate, objective measurements that illustrate how a hearing instrument will perform in your patient's ear. Together, we can rise to that challenge.

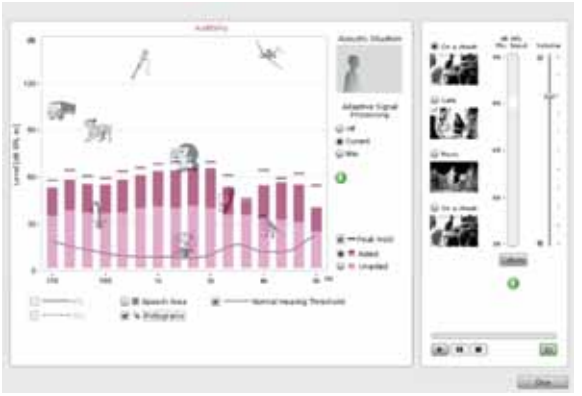
Pure comes with Connexx™ 6.3, the latest fitting software from Siemens. Connexx 6.3 features ConnexxFit™, a new fitting strategy to combine the benefits of scientifically proven fitting formulas like NAL-NL1 and DSL m[i/o] with device specific knowledge.

It automatically selects the optimum fitting formula depending on the hearing loss and applies modifications to account for the instrument's acoustics and selected coupling method.

eArena training programme

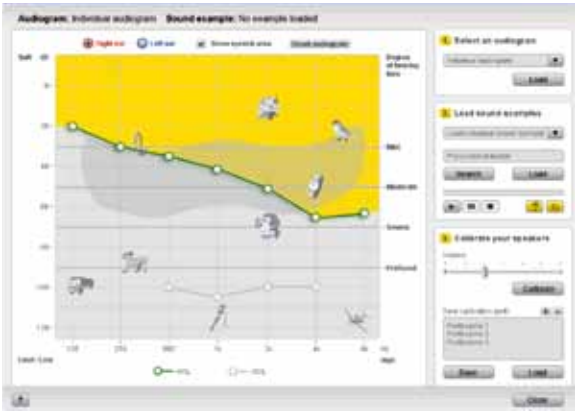
We want the wearers and their hearing instruments to get along right from the very beginning. Which is why we developed eARena™, an interactive DVD with exercises designed to help them get the most out of their new hearing instruments. From improving basic auditory skills to helping to recognize sounds they may have "forgotten" due to hearing loss, eARena will lead to pure harmony.

The DVD can be played on a computer, laptop or DVD player.



Real Time Display (700 series only)

Real Time Display is a counseling tool within the Connexx fitting software. This feature enables you to demonstrate visually and acoustically key hearing instrument features. When activated, the hearing instrument's input and output level, microphone mode, or noise reduction level are continuously read out and displayed. This information can be used to clearly demonstrate to patients the advanced functionabilities of their Siemens Pure.



Hearing Loss Simulator

Hearing Loss Simulator allows your patient's family or friend to experience hearing loss. It can use the patient's actual data or select from a number of pre-defined audiograms. This helps loved ones support the decision making process for hearing instruments.

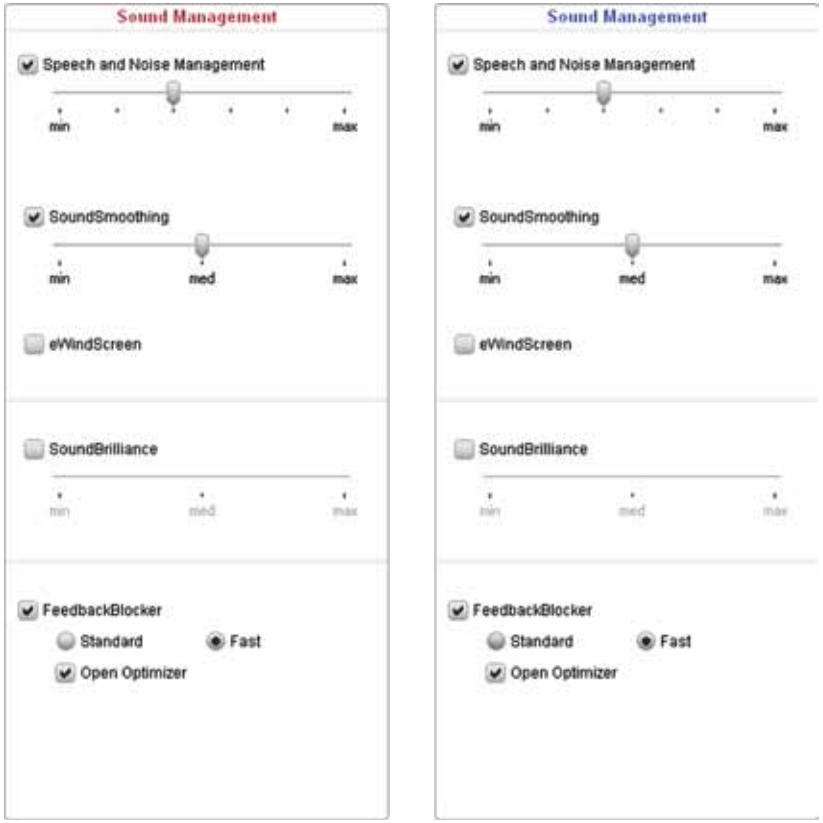
Open Optimizer

New Open Optimizer improves FeedbackBlocker effectiveness.

If Open Optimizer is checked, critical gain of open Pure fittings increases by, on average, 4 dB in noisy environments and 7 dB in quiet (e.g. in the clinic or shop).

This is achieved by optimizing the parameterization of the signal processing on specific properties of the acoustic feedback path of open fittings. As a result, the effectiveness of the FeedbackBlocker for open fittings is improved.

Hence, for fittings with closed and open domes and vents larger than 2.5mm, Open Optimizer should be activated in order to achieve maximum feedback stability. First Fit automatically activates this feature for the mentioned fittings.

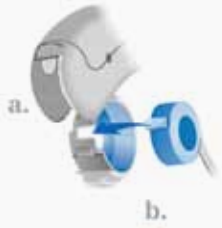


Sound management
For open fittings, Open Optimizer can be activated in Connexx to increase critical gain of open Pure fittings by about 4 dB in noisy environments and 7 dB in quiet.

How to connect programming cables.

You can connect Pure to your programming station in a snap with this simple 3-step process.

1. Open the battery compartment.



2a. Insert the "battery pill" in the battery compartment. On the positive side you will see the attached programming strip.

2b. You will see a groove on the battery door which is the width of the programming connection strip. Position the pill so the strip fits exactly in this groove.

3. Close the battery compartment so that the programming strip extends outside.

Exchanging the microphone cover.

In just 3 simple steps, you can change the microphone cover to match the housing.

1. Remove the receiver unit. Use the removal tool to push out the pin that holds the microphone cover (refer to picture).

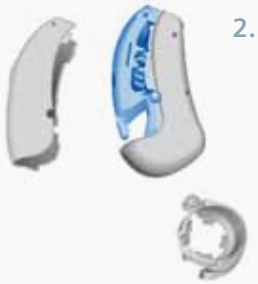
2. Carefully remove the front cover.

3. Carefully attach the new front cover. Push the pin that holds the front cover back into the housing.

Exchanging the housing.

With Pure, changing the housing is simple.

1. Remove the receiver unit. Use the removal tool to push out the 3 pins on the instrument housing.



2. Carefully remove the front cover and battery door.

3. Carefully remove the backside of the housing. Carefully attach the new backside of the housing. Carefully attach the new battery door and front cover. Push the 3 pins back into the housing. Attach the receiver unit.

Part numbers

	Colors			Color Exchange Kits (ROW)			Microphone Color Exchange Kit
	Pure 700	Pure 500	Pure 300	Pure 700	Pure 500	Pure 300	Pure 700/500/300
Beige (1)	10296097	10297098	10424563	10296163	10297095	10426104	10297206
Granite (2)	10296635	10297099	10424615	10296644	10297100	10426114	10297207
Grey (3)	10296662	10297105	10424616	10296682	10297106	10426117	10297208
Brown (4)	10296696	10297117	10424614	10296698	10297118	10426108	10297209
Black (5)	10296710	10297111	10424565	10296712	10297112	10426106	10297210
Silver (6)	10296727	10297123	10424618	10296729	10297124	10426122	10297211
Pearl White (7)	10296747	10297129	10424617	10296745	10297130	10426118	10297212
Golden Blonde (30)	10296764	10297135	—	10296766	10297136	10426112	10297213
Chestnut (32)	10296779	10297141	—	10296781	10297142	10426120	10297214
Sandy Brown (31)	10296795	10297147	—	10296797	10297148	10426110	10297215
Charcoal (33)	10296810	10297153	—	10296812	10297154	—	10297216
Evening Red (40)	10296825	10297159	—	10296827	10297160	—	10297217
Midnight Blue (41)	10296840	10297165	—	10296842	10297166	—	10297218
Titanium (34)	10296857	10297171	—	10296859	10297172	—	10297219

14 colors including 12 natural hair colors and skin tones

Receiver Units

Receiver Unit	Description	Type	Pure 700 / 500 / 300
45dB	left (43.0 mm)	0L S	10417729
45dB	right (43.0 mm)	0R S	10417730
45dB	left (48.0 mm)	1L S	10417731
45dB	right (48.0 mm)	1R S	10417732
45dB	left (53.1 mm)	2L S	10417733
45dB	right (53.1 mm)	2R S	10417734
45dB	left (58.2 mm)	3L S	10417735
45dB	right (58.2 mm)	3R S	10417736

55dB	left (43.0 mm)	0L M	10296260
55dB	right (43.0 mm)	0R M	10296261
55dB	left (48.0 mm)	1L M	10175483
55dB	right (48.0 mm)	1R M	10175484
55dB	left (53.1 mm)	2L M	10175485
55dB	right (53.1 mm)	2R M	10175486
55dB	left (58.2 mm)	3L M	10175487
55dB	right (58.2 mm)	3R M	10175488

65dB	left (43.0 mm)	0L P	10296491
65dB	right (43.0 mm)	0R P	10296492
65dB	left (48.0 mm)	1L P	10296042
65dB	right (48.0 mm)	1R P	10296045
65dB	left (53.1 mm)	2L P	10296043
65dB	right (53.1 mm)	2R P	10296046
65dB	left (58.2 mm)	3L P	10296044
65dB	right (58.2 mm)	3R P	10296047
Concha look kit			10417804

Grid Domes

Dome	Description	Units	Pure 700 / 500 / 300
Grid Open	6 mm	10	10417707
Grid Open	8 mm	10	10417705
Grid Open	10 mm	10	10417706
Grid Closed	8 mm	10	10417708
Grid Closed	10 mm	10	10417709
Grid Double	8 mm	10	10417710
Grid Double	10 mm	10	10417711

Hardware

	Description	Pure 700 / 500 / 300
Charger 312	Charger for 2 Pure instruments	10423511
ProPocket	Remote control unit	10417240
Tek	Wireless enhancement	10417268
ePen	Remote control unit	10417242
Programming Adapters	Connector between HiPro cable and Hearing Instrument	10175299

Services

	Description	Pure 700 / 500 / 300
eARena	Auditory training program	NTSC 10297234 PAL 10297233